

APPARATUS AND METHODS FOR CONVERTING TEXTUAL INFORMATION TO AUDIO-BASED OUTPUT

ABSTRACT OF THE DISCLOSURE

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The invention is directed to techniques for providing text-to-speech conversion of textual information at the request of a user of a client device, such as a computer or nonvisual communication device (e.g. telephone). In one embodiment, a proxy browser receives the request for the audio output of a body of text from the client device and passes it to a web application in the form of a hypertext transport protocol (HTTP) request. The web application divides the body of text into text portions that can be readily converted from text to speech by text-to-speech (TTS) software. The web application determines the identity of a TTS server providing TTS software that is capable of converting the text portions to an audio output format. The web application then provides a sequential list of resource identifiers to the proxy browser, in which each resource identifier includes one of the text portions and the identity of the TTS server. The proxy browser then make web requests based on the resource identifiers to the TTS server. Each web request includes one of the text portions. The TTS server then converts the text portion included in each web request to an audio file, and sends the audio file to the proxy browser. The proxy browser then plays the audio file through a connection to the client device, and the user hears the audio file through the client device's speaker. If the proxy browser make all the text portion web requests in sequence corresponding to the text portions for the entire body of text, then the user hears the entire body of text in a substantially continuous manner.

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